Templates Part II
Interim Progress Report - Budget Period Three
Workplan - Budget Period Four
Focus Area D: Laboratory Capacity – Chemical Agents

Budget Period Three Progress Report

NOTE: Progress report applies only to California, Michigan, New Mexico, New York, and Virginia

Using the space below, provide a brief status report on your Focus Area D Laboratory Capacity. The progress report narrative should not exceed 1 page, single-spaced. Applicants are welcome to use bullet-point format in their answers, so long as the information is clearly conveyed in the response.

Provide an update on progress during Project Year III toward achieving laboratory capacity:
Does Not Apply

Budget Year Four Workplan

For each Recipient Activity applicants should complete the work plan templates attached below. Applicants are welcome to use bullet-point format in their answers, so long as the information is clearly conveyed in the response. All responses should be brief and concise. **Please note that full use of the CDC templates will meet all of the requirements for submission of a progress report and work plan**. Although no additional information is required, grantees may elect to submit other essential supporting documents via the web portal by uploading them as additional electronic files.

CRITICAL CAPACITY #10 (Level-One Laboratories): To develop and implement a jurisdiction-wide program that provides rapid and effective laboratory response for chemical terrorism by establishing competency in collection and transport of clinical specimens to laboratories capable of measuring chemical threat agents.

RECIPIENT ACTIVITIES:

1. **CRITICAL BENCHMARK #15 – APPLICABLE TO LEVEL-ONE LABORATORIES:** Hire and train a chemical terrorism laboratory coordinator (chemist or medical technologist) and assistant coordinator to advise the laboratory director, the State Terrorism Coordinator and other public health and environmental health officials about chemical terrorism incidents and preparedness. These individuals are responsible for ensuring the proper collection, labeling, and shipment of blood, urine, and other clinical specimens required in response to known or suspected chemical terrorism incidents and for ensuring associated data and communication requirements are met.

Strategies: What overarching approach(es) will be used to undertake this activity?

1. In cooperation with Epidemiologist from the DOH Office of Non-Infectious Disease Epidemiology (NICE) generate a plan of activities for a chemical terrorism laboratory coordinator (CTLC) and assistant chemical terrorism laboratory coordinator (ACTLC) with clear definitions of their roles and responsibilities and expected output of their work.
2. Recruit and hire a chemical terrorism laboratory coordinator (CTLC) and an assistant chemical terrorism laboratory coordinator (ACTLC)
3. Train hired CTLC and ACTLC through attendance of training classes, seminars, and conferences (LINK to Focus Area G).
4. Develop protocols for proper collection, labeling, and shipment of blood, urine, and other clinical specimens in response to chemical terrorism.
5. Train statewide clinical laboratory personnel to ensure that chemical terrorism response related clinical specimens are collected, labeled, and shipped properly (LINK to Focus Area C and G).
6. Develop protocols for proper communication of actions and data associated with collection and testing of clinical specimens during chemical terrorism response event and providing

training to local health officials statewide about communication of chemical terrorism related specimen data (Link to Focus Areas A, C, and G).

Tasks: What key tasks will be conducted in carrying out each identified strategy?

1a Define duties and skills requirements for CTLC and ACTLC.
1b Identify clear expectations of CTLC and ACTLC work for the 2003-04 grant period.
2a Conduct searches for candidates for CTLC and ACTLC positions.
2b Interview and select candidates with skills and experience that fit the defined CTLC and ACTLC positions.
2c Purchase equipment/supplies to support FTE.
3a Develop a formal plan for training of CTLC and ACTLC.
3b Register CTLC and ACTLC for training sessions, seminars, conferences, and hands on training (include travel as necessary).
4a Consult with Centers for Disease Control and Prevention (CDC), Association of Public Health Laboratories (APHL), Focus Area C for instructions/recommendations on collecting, labeling, and shipping specimens.
4b Develop protocols for collection, labeling and shipment of chemical terrorism specimens for state of Washington Laboratory Response Network (LRN)..
4c Review draft protocols with CDC, APHL, NICE Epidemiologist, and Focus Area C.
4d Incorporate changes in finalized protocols.
5a Publish and distribute protocols to state-wide clinical laboratories.
5b Provide training to state-wide clinical laboratories on collection, labeling, and shipment of chemical terrorism specimens.
6a. Consult state and local public health officials regarding proper channels of communication of information associated with collection and testing specimens during a chemical terrorism event.
6b Write protocols describing approved communication of information and data associated with chemical terrorism specimens.
6c Add this protocol to the State LRN reporting system and distribute to local/state officials and statewide laboratories.
6d Train local health officials and statewide labs on proper communication of information and data associated with chemical terrorism response specimens developing training material and providing training (LINK to Focus Area G).

Timeline: What are the critical milestones and completion dates for each task?

1a CTLC and ACTLC positions specs, 08/ 2003
1b List and description of expected accomplishments for grant period 2003-04, 09/2003
2a Position announcement, review of applications, interviews, 10/2003
2b Job offers, ELS OD, NICE Epi, 11/03
2c Purchase order, 11/03
3a Plan of training, 11/2003
3b Schedule of training, travel, conference attendance - Ongoing 2003-2004
4a Consultation with CDC and APHL, 01/2004

4b Draft protocol ready for review, 02/ 2004
4c Convene a panel for protocol review, 02/2004
4d Comments from review panel are received and protocol finalized, 03/2004
5a Protocol is distributed, 04/2004
5b Training is provided, 05/2004
6a Consultation input received, 02/2004
6b Protocol is available, 03/ 2004
6c Protocol published in LRN and sent to state-wide laboratories and local health officials, 04/ 2004
6d Training of state-wide laboratories and local health officials - Ongoing 2004

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

1a DOH Environmental Laboratory Sciences (ELS) Office Director and NICE Epidemiologist
1b ELS Office Director and NICE Epidemiologist
2a ELS Office Director responsible for ACTLC position and NICE Epidemiologist responsible for CTLC position
2b NICE Epidemiologist, ELS Office Director
2c ELS Office Director
3a NICE Epidemiologist, ELS Office Director
3b ELS Office Director
4a CTLC
4b CTLC, ELS Office Director
4c CTLC
4d CTLC and ACTLC
5a ACTLC
5b ACTLC
6a CTLC
6b CTLC and ACTLC
6c ACTLC
6d ACTLC

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

- By the end of the grant year DOH will have hired and trained chemical terrorism coordinator and assistant chemical terrorism coordinator.
- Protocols for chemical terrorism specimen collection, labeling and shipping and protocol for communication of chemical terrorism specimen information and data will be developed and distributed to local health officials and state-wide laboratories.
- Training of local health officials and statewide laboratories on proper specimen collection and shipping, as well as proper communication of specimen information will be in progress.

2. Develop a component, incorporated within the comprehensive response plan, that directs

how public health, food testing, environmental testing, and other laboratories within your jurisdiction will respond to a chemical terrorism incident. The plan must include (a) roles and responsibilities, (b) inter- and intra-jurisdictional surge capacity, (c) a description of how the plan integrates with other department-wide emergency response efforts, (d) protocols for the safe transport of specimens by air and ground, and (e) a mechanism for reporting laboratory data to public health officials, law enforcement agencies, and other chemical terrorism LRN laboratories. **(LINK WITH ALL OTHER FOCUS AREAS)**

Strategies: What overarching approach(es) will be used to undertake this activity?

1. Conduct a survey of all governmental (Federal, State, and LHJ), hospital, private, and Academic laboratory facilities within the state potentially available to participate in chemical terrorism response for coordinating and performing clinical, food, and environmental testing.
2. Conduct an assessment of the existing capabilities of surveyed laboratories for testing specimens and/or transporting/shipping specimens (LINK to Focus Areas A, C, and G).
3. Formulate a plan to develop and enhance the capabilities of laboratories designated for testing or shipping of clinical specimens or food and environmental samples in response to chemical terrorism incident. Define the roles and responsibilities of these laboratories in the state laboratories network for chemical terrorism response. Integrate EPA, FDA, and other federal partner's programs and initiatives into a plan to develop/enhance laboratory capacity (LINK to Focus Areas A, C, and G).
4. Build a network of inter- and intra-jurisdictional surge capacity for each local testing laboratory and develop memoranda of understanding (MOUs) with surge capacity laboratories.
5. Build a laboratory chemical terrorism state response network that integrates with other department-wide emergency response efforts such as the Emergency Operations Center, Bioterrorism Coordinator, City and County Emergency Response Organizations, National Guard, Civil Support Team, etc.
6. Develop protocols for the safe transport of specimens by air and ground and distribute them to local laboratories.
7. Develop a mechanism for reporting laboratory data to public health officials, law enforcement agencies and other chemical LRN laboratories (LINK to Focus Area C).

Tasks: What key tasks will be conducted in carrying out each identified strategy?

1a Working with Focus Areas B & C, the regional Food and Drug Administration (FDA) and Environmental Protection Agency (EPA); Washington State Department of Energy (DOE), DOH Division of Environmental Health, the University of Washington (UW), Washington State University (WSU), and local health jurisdictions (LHJs) make a list of all laboratories within the state that test human specimens, food, and environmental samples.

1b Prepare a survey questionnaire to identify laboratories that perform testing on clinical and/or

food/environmental samples for chemical agents and laboratories that ship specimens or samples.

1c Send the survey out to the laboratories identified in 1a, above.

1d Follow up by directly contacting laboratories that did not respond to the survey.

2a Analyze survey data

2b Compile the survey data by geographical areas and assess the existing capabilities of laboratories in each area.

2c Review the survey data with state coordinators for developing Washington State preparedness for biological and chemical emergency responses.

3a Establish a network of local laboratories responsible for testing or shipment of specimens/samples that ensures that each region within the state has the laboratory capability to respond to chemical terrorism event.

3b Define roles and responsibilities within the network of local laboratories in the state plan for preparedness to chemical terrorism event response. (LINK to Focus Area G)

3c Identify development/enhancement of capability and capacity needed for each network laboratory.

3d Present laboratory network response plan to stakeholders.

4a Coordinating with local health officials, CDC, EPA, FDA, and other federal partners identify facilities in each area of the state (or neighboring states) to be used as surge capacity laboratories for chemical terrorism response.

4b Establish a relationship with these laboratories and create agreements for using them as a surge capacity laboratory.

5a Share the chemical terrorism laboratories network response plan with DOH Biological and Radiation terrorism response coordinators.

6a Consult agencies responsible for setting safety rules for air and ground transportation of biological and chemical toxic materials.

6b Consult CDC and APHL on their protocols for transporting biological and chemical toxic materials by air and ground.

6c Write WAPHL protocols for transporting specimens/samples collected in response to chemical terrorism by air and ground.

7a Discuss with NICE epidemiologist, Washington DOE, DOH Division of Environmental Health, FDA, and EPA, what mechanism needs to be developed for proper channels of reporting of test results.

7b Develop a reporting protocol specifying how lab results will be reported and shared with public health officials and law enforcement agencies.

7c Include reporting protocol in training plans. (LINK to Focus Area G)

Timeline: What are the critical milestones and completion dates for each task?

1a List of laboratories, 01/2004

1b Survey questionnaire, 02/2004

1c Surveys mailed to laboratories, 01/2004

1d Contacts made with no-response laboratories, 03/2004

2a Surveys are reviewed, 03/2004

2b Survey data compiled, 03/ 2004
2c Compiled data, 04/2004
3a Network, 04/2004
3b Local laboratories roles/responsibilities defined, 05/2004
3c Plan of developing laboratories capabilities, 06/2004
3d Plan of developing laboratories network is presented, 07/2004
4a Identified surge capacity labs, 07/2004
4b Established agreements with surge capacity labs, 08/2004
5a Information shared, 08/2004
6a Information acquired, 08/2004
6b Information acquired, 07/2004
6c Protocol, 07/2004
7a Documentation of discussions, 06/2004
7b Developed protocol, 07/2004
7c Training materials, 07/2004

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

1a ELS Office Director
1b ELS Office Director
1c ELS Office Director
1d ELS Office Director
2a ELS Office Director
2b ELS Office Director
2c CTLC
3a PHL Director
3b PHL Director
3c ELS Office Director
3d CTLC
4a PHL Director
4b PHL Director
5a CTLC
6a ELS Office Director
6b ELS Office Director
6c ELS Office Director
7a CTCL,
7b CTCL
7c ELS Office Director

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

- By the end of the 2003-04 grant period, the WAPHL will assess state-wide laboratory capabilities and establish a laboratory network for chemical terrorism response.
- The WAPHL will have a plan in place to develop and enhance laboratory response capacities throughout the state.

3. Establish and document in the comprehensive response plan, relationships with local members of HazMat teams, first responders, local, state, and federal law enforcement, and the Army National Guard (WMD-CST) to coordinate laboratory support for response to chemical terrorism with their response activities.

Strategies: What overarching approach(es) will be used to undertake this activity?

1. Establish relationships with laboratories and local, state and federal members first responders, HazMat teams, law enforcement, and Army National Guard (LINK to Focus Areas A and C).
2. Establish protocols for sample collection and transportation/shipping
3. Train first responders in proper sample collection for laboratory testing in response to chemical terrorism event (LINK to Focus Area G).
4. Create a database of organizations and contact of first responders throughout the state.

Tasks: What key tasks will be conducted in carrying out each identified strategy?

1a Working with Focus Ares A and C, state and local law enforcement, Department of Transportation, local fire departments, and federal partners, develop a list of first responders in Washington State
1b Meet with key partners of the local first responders.
1c Develop a plan of coordinated actions between laboratories and first responders in the event of chemical terrorism.
2a Working with first responders, write protocols for specimen/sample collection and transportation.
3a Develop training workshop to educate first responders in proper specimens/samples collection, initial screening, chain of custody, and transportation.
3b Sponsor periodic training sessions for first responders.
4a Collect contact information for local first responders and enter information in the first responders database.

Timeline: What are the critical milestones and completion dates for each task?

1a List of first responders, 04/2004
1b Meetings schedule, 05/2004
1c Developed plan, 05/2004
2a Written Protocols, 06/2004
3a Training conducted, 07/2004
3b Training schedule, 07/2004
4a Database available, 07/2004

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

1a	ELS Office Director
1b	ELS Office Director
1c	CTLC
2a	ELS Office Director
3a	ELS Office Director
3b	ELS Office Director
4a	PHL Training Manager

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

- By the of the grant period the WAPHL will identify first responders across the state and establish response and communication protocols.
- First responders will be incorporated into the overall state emergency response plan and will have a clear understanding of their roles and responsibilities.

4. Join the chemical terrorism component of the Laboratory Response Network (LRN) and ensure that capacity exists (within the state, through partnerships with Level-Two and/or Level-Three laboratories in other states, or CDC) for validated testing of chemical agents in clinical specimens.

Strategies: What overarching approach(es) will be used to undertake this activity?

1. Through PHL Director join the Laboratory LRN as the chemical terrorism component for the state of Washington.
2. Establish relationships with the Level-Three laboratories for validated testing of chemical agents in clinical specimens from Washington State.

Tasks: What key tasks will be conducted in carrying out each identified strategy?

1a	Join LRN for the chemical terrorism component.
2a	Identify out-of-state Level-Three Laboratories available for validated testing of chemical agents in specimens from Washington State.
2b	Contact Level-Three Laboratories and obtain their operational and testing procedures.
2c	Establish MOU with the Level-Three Laboratories for specimen testing.

Timeline: What are the critical milestones and completion dates for each task?

1a	LRN membership code, 12/2003
2a	Identified Laboratories, 09/2003
2b	Documentation of Contacts, 10/2003
2c	MOU established, 12/2003

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

1a PHL Director
2a PHL Director
2b ELS Office Director
2c PHL Director

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

By the end of 2003-04 grant period the WAPHL will establish formal working relationships with existing Level-Three laboratories.

5. Enhance relationships with other chemical terrorism-related resources such as poison control centers, emergency medical personnel, medical toxicologists, food regulatory laboratories, schools of public health, and other partners with a view to ensuring that medical and public health officials have the benefit of at least preliminary chemical laboratory analyses in time to facilitate both the care of victims and the management of the incident. To this end, sponsor outreach efforts, professional conferences, and meetings.

Strategies: What overarching approach(es) will be used to undertake this activity?

1. Establish relationships with State of Washington and local Poison Control Centers, local Emergency Medical Personnel, Toxicology laboratories, Regional FDA Laboratory, and University of Washington School of Public Health
2. Establish relationship with local medical and public health officials and organizations.
3. Include chemical terrorism response partners in the protocol for reporting lab results specifying how (through what channels) lab results will be shared with them.
4. Sponsor outreach efforts for partners to attend state meetings and conferences related to the state chemical terrorism preparedness and events
5. Develop a database of contact information for chemical terrorism-related organizations.

Tasks: What key tasks will be conducted in carrying out each identified strategy?

1a Contact key personnel at poison control centers, emergency medical centers, the State of Washington Toxicology Laboratory, the Regional FDA Laboratory, the University of Washington School of Public Health, Washington State University and similar organizations/agencies within the state.
1b Meet with key personnel to discuss WAPHL activities for developing state public health preparedness for response to chemical terrorism.
2a Identify local health officials and professional organizations and attend conferences and meeting as appropriate.

2b Provide training materials and speakers for meeting with professional groups (LINK to Focus Area G).
2c Provide training about the LRN system and its operations (Link to Focus Area G).
3a Develop data-sharing protocol including a communication plan with chemical terrorism-related resources.
3b Share this protocol with partners.
4a Invite partners to upcoming meetings/conferences.
4b Sponsor attendance of meeting/conferences.
4c Publish articles and chemical terrorism training classes schedules in Elaborations newsletter
4d Attend local and national chemical terrorism related conferences.
5a Identify resources and create a database of contacts for distribution of chemical terrorism related information.

Timeline: What are the critical milestones and completion dates for each task?

1a Contacts documented, 12/2003
1b Meeting agenda, 02/2004
2a Local health officials identified, 12/2003
2b Meeting agenda - Ongoing 2003-04
2c Training Materials, 07/2004
3a Protocol, 07/2004
3b Protocol distributed, 07/2004
4a Schedule of meeting - Ongoing 2003-04
4b Schedule of meetings - Ongoing 2003-04
4c Articles, training schedule - Ongoing 2003-04
4d Conferences schedule - Ongoing 2003-04
5a Database, 08/2004

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

1a CTCL
1b CTCL
2a-5a ELS Office Director

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

By the end of the grant period the WAPHL will have its network of chemical terrorism resources expanded to include emergency medical groups, poison control centers, universities, food regulatory and other organizations. The WAPHL will sponsor outreach activities including meetings, conferences, and training.

ENHANCED CAPACITY #7 (Level-Two laboratories): In addition to establishing Level-One capacity, Level-Two Laboratories are to establish adequate and secure laboratory facilities,

reagents, and equipment (e.g., ICP-MS, GC-MSD) to rapidly detect and measure in clinical specimens Level-Two chemical agents (such as cyanide-based compounds, heavy metals, and lewisites). Currently, CDC methods for Level-Two chemical agents use analytical techniques of inductively coupled plasma mass spectrometry and gas chromatography mass spectrometry. The list of Level-Two chemical agents may expand as better methods are developed. Tandem mass spectrometry methods are not required for Level-Two chemical agents. *Prerequisite: To be eligible for Level-Two funding, the recipient must document a basic level competency in analytical chemistry and laboratory quality control in measurements of low concentrations of chemicals in clinical samples. Evidence of such competency would include a laboratory program in existence for at least one year that includes the quantitative measurement of low levels of a chemical in blood, urine, or environmental specimens (e.g., blood lead analysis program, EPA certification for chemical contaminant analyses of drinking water, or CLIA certification for clinical chemistry measurements).*

RECIPIENT ACTIVITIES:

1. Develop or enhance plans and protocols that address: (a) clinical specimen transport and handling, (b) worker safety, (c) appropriate Bio-Safety Level (BSL) conditions for working with clinical specimens, (d) staffing and training of personnel, (e) quality control and assurance, (f) internal and external proficiency testing, (g) triage procedures for prioritizing intake and testing of specimens or samples before analysis, (h) secure storage of critical agents and samples of forensic value, and (i) appropriate levels of supplies and equipment needed to respond to chemical terrorism events. This should be documented in your comprehensive response plans.

Strategies: What overarching approach(es) will be used to undertake this activity?

Note: The issue of basic laboratory competency required to receive Level-Two funding is addressed in an attachment "Washington State Public Health Laboratory Current and Past Expertise in Performing Chemical Tests."

1. [redacted] protocol for specimen transportation, receiving and handling at the PHL laboratory
2. [redacted] appropriate [redacted] to the Chemistry Laboratory to provide safe working conditions when handling clinical specimens.
3. Recruit and hire a PhD chemist and analytical chemist to work on procedure implementation and test chemical agents in clinical specimens.
4. In cooperation with CDC, APHL, and instrument vendors, provide training in chemical analyses of clinical specimens. (LINK to Focus Area G).
5. [redacted] quality control (QC) and quality assurance (QA) components of the [redacted] procedures for performance of chemical testing on clinical specimens.

6. [redacted] an internal proficiency testing plan.
7. In cooperation with CDC and APHL, [redacted] available external proficiency testing programs for testing chemical agents in clinical specimens.
8. [redacted] a protocol for [redacted] incoming specimens (triage).
9. Add storage facilities to the WAPHL to ensure [redacted] of critical agents and samples of forensic value.
10. Implement a plan to ensure the availability of supplies and equipment needed to respond to chemical terrorism event.
11. Combine appropriate plans and protocols into a laboratory chemical terrorism response manual.

Tasks: What key tasks will be conducted in carrying out each identified strategy?

1a In cooperation with CDC, APHL, and the PHL Microbiology and Radiation Laboratories [redacted] existing protocols related to safe transportation, receiving and handling of chemical terrorism specimens.
1b [redacted] WAPHL protocols for safe transportation, receiving and handling of chemical terrorism specimens.
2a [redacted] for the optimal model of a [redacted] for the Chemical Laboratory application.
2b Purchase the approved model of [redacted]
3a Recruit and hire a PhD (or equivalent) chemist as a lead worker in analytical procedures implementation
3b Recruit and hire Chemist 1 or 2 as an analytical bench worker to perform tests on clinical specimens.
3c Purchase equipment/supplies to support FTEs
4a Consult with CDC and APHL concerning availability of training for testing. Contact instrument vendors concerning available training for the operation of instruments.
4b Devise a training plan for new chemist positions.
4c Provide planned training.
5a In cooperation with CDC [redacted] QC and QA components needed for testing chemical agents in clinical specimens to assure the accuracy and precision of results.
5b Develop QC and QA plan to include in WAPHL test procedures.
6a Devise a plan to [redacted] internal proficiency testing of chemical agents.
6b Present the internal proficiency testing plan to the WAPHL QA committee
6c [redacted] the [redacted] internal proficiency testing plan into the laboratory testing algorithm.
7a [redacted] available external proficiency testing programs for testing [redacted] and [redacted]

[redacted] in clinical samples.
7b Implement [redacted] available proficiency testing programs.
8a Identify staff responsible for the prioritization of specimens.
8b Identify critical control points in the triage process.
8c Write the pre-analytical prioritization (triage) protocol
9a [redacted] critical agents and the requirements for secure storage.
9b Plan the construction of a [redacted] facility at the WAPHL.
9c Implement the plan to construct a secure storage facility.
10a [redacted] the supplies and amounts needed for an appropriate chemical terrorism response at the WAPHL to ensure continual readiness.
10b Appoint an individual to be responsible for the availability of chemical terrorism supplies within an expiration days at all times.
10c [redacted] responsibilities to laboratory personnel for keeping equipment and instruments in operational condition at all times.
11a [redacted] responsibility for each element of a laboratory chemical terrorism response manual.
11b Combine all the elements related to laboratory preparedness for chemical terrorism response into a WAPHL chemical terrorism response manual.

Timeline: What are the critical milestones and completion dates for each task?

1a Needs documentation, 12/2003.
1b Protocol written, 01/2003
2a Model determined, 12/2003
2b Purchase order, 02/2004
3a PhD Chemist hired, 11/2003
3b Chemist hired, 11/2003
3c Order, 11/2003
4a List of available training, 10/2003
4b Training schedule, 11/2003
4c Training documentation, Ongoing 2003-04
5a Information for development, 01/2004
5b QC & QA plan, 02/2004
6a PHL QA committee meeting, 02/2004
6b Internal proficiency testing plan, 02/2004
6c Internal proficiency testing plan approved, 03/2004
7a External proficiency testing programs identified, 03/2004
7b Application for external proficiency testing plan, 08/2004
8a Contacts, 04/2004
8b Meeting agenda, 05/2004
8c Protocol, 05/ 2004
9a Identification, 04/2004
9b Plan, 04/2004
9c Implementation, 08/2004

10a List of supplies, 05/2004
10b Individual name and duties, 05/2004
10c Responsibilities assigned, 05/2004
11a Personnel names, 04/2004
11b Manual completed, 08/2004

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

1a-2b Lead Chemist
3a ELS Office Director
3b ELS Office Director
4a ELS Office Director
4b PHL Training Coordinator
4c ELS Office Director
5a Lead Chemist
5b Lead Chemist
6a ELS Office Director
6b ELS Office Director
6c Lead Chemist
7a Lead Chemist
7b ELS Office Director
8a ELS Office Director
8b ELS Office Director
8c ELS Office Director
9a ELS Office Director
9b PHL Operation Manager
10a ELS Office Director
10b ELS Office Director
10c ELS Office Director
11a ELS Office Director
11b Lead Chemist

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

By the end of the grant period the WAPHL will have a complete chemical terrorism response manual.

2. Level-Two laboratories must, in collaboration with CDC, purchase equipment, hire and train staff, implement analytical methods, participate in proficiency testing programs, and demonstrate competency in the analysis of Level-Two chemical agents or their metabolites in human specimens. Level-Two laboratories must achieve CLIA certification within 18 months of funding.

Strategies: What overarching approach(es) will be used to undertake this activity?

1. Purchase gas chromatography mass spectrum (GC MS) instrument and MPS Prepstation for analyzing cyanide, lewisite, and VOC in clinical specimens.
2. Purchase ICP MS instrument with auto sample injector for analyzing arsenic and other metals
3. Purchase solvent concentrator
4. Purchase solid phase extractor
5. Purchase chemical fume hood
6. Purchase biological safety cabinet
7. Purchase -70°C freezer
8. Purchase solvent storage cabinets
9. Purchase acid and base cabinets
10. Purchase supplies of calibration materials, reagents, and equipment parts
11. Recruit and hire PhD (or equivalent) chemist to be a Lead Chemist for implementation of testing procedures and Analytical Chemist, level 2, for performing tests.
12. Train hired chemists through attending training classes, workshops, and seminars (LINK to Focus Area G).
13. Participate in proficiency testing programs.
14. Demonstrate competency in the analysis of Level-Two chemical agents or their metabolites in human specimens by generating accurate results for QC and proficiency testing specimens and showing good laboratory practices in handling specimens and performing analyses.
15. Achieve Clinical Laboratory Improvement Amendments (CLIA) certification by January 2005

Tasks: What key tasks will be conducted in carrying out each identified strategy?

1a Identify appropriate GC MS model
1b Purchase approved model
2a Identify appropriate ICP MS model
2b Purchase approved model
3a Identify appropriate solvent concentrator model
3b Purchase approved model
4a Identify appropriate solid phase extractor model
4b Purchase approved model
5a Identify appropriate chemical fume hood model
5b Purchase approved model
6a Identify appropriate biological safety cabinet
6b Purchase approved model

7a Identify -70°C freezer model
7b Purchase approved model
8a Identify appropriate solvent storage cabinet
8b Purchase approved model
9a Identify and purchase acid and base storage cabinet
10a Identify needed supplies of calibration material reagents and equipment parts
10b Purchase needed supplies of calibration material reagents and equipment parts
11a Define duties and skills of Lead Chemist and Analytical Chemist
11b Conduct a search for candidates for Lead and Analytical Chemists.
11c Interview and select candidates with skills and experience that fit the most for the defined Lead and Analytical Chemists positions
11d Purchase equipment/supplies to support FTE
12a Develop a formal training plan for training Lead and analytical Chemists
12b Register Lead Chemist and Analytical Chemist for training sessions, seminars, and hands on workshops including travel as necessary.
13a Identify proficiency testing programs for testing chemical agents in clinical specimens available nationally-wide
13b Implement appropriate proficiency testing programs.
14a Pass tests for the internal and external proficiency tests.
14b Pass tests on quality control samples
15a Apply for CLIA certification for chemical tests in clinical specimens
15b Pass all CLIA requirements for granting a certification.

Timeline: What are the critical milestones and completion dates for each task?

1a Plans, 12/2003
1b Purchasing, 01/2004
2a Plan, 12/2003
2b Purchasing, 01/2004
3a Plan, 12/2003
3b Purchasing, 01/2004
4a Plan, 12/2003
4b Purchasing, 01/2004
5a Plan, 12/2003
5b Purchasing, 01/2004
6a Plan, 12/ 2003
6b Purchasing, 01/2004
7a Plans, 01/2004
7b Purchasing, 02/2004
8a Plans, 01/2004
8b Purchasing, 02/2004
9a Purchasing, 11/2003
10a Plans for supplies, 12/2003
10b Purchasing, Ongoing

11a Defined duties and skill-sets, 09/2003 11b Announcement, 09/2003 11c Interview, hiring, 11/2003 11d Purchase order, 11/2003 12a Plan of training, 12/2003 12b Schedule of training, 11/ 2003 13a Proficiency testing programs, 10/2003 13b Application, 11/2004 14a Results, Ongoing 14b Evaluation of results, Ongoing 15a Application, 08/2004 15b Certification, 02/2005

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

All tasks ELS Office Director

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

By the end of the 2003 - 2004 grant year, the WAPHL will have analytical procedures and proficiency testing programs for testing chemical agents in clinical specimens implemented in order to be qualified to apply for CLIA certification at the beginning of the following grant period.

3. **CRITICAL BENCHMARK #16 – APPLICABLE TO LEVEL-TWO LABORATORIES ONLY:** Participate in at least one exercise per year that specifically tests chemical terrorism laboratory readiness and capability to detect and identify at least one chemical-threat agent.

Strategies: What overarching approach(es) will be used to undertake this activity?

1. Participate in at least one laboratory chemical terrorism simulated exercise involving state, local, regional, hospital, and federal (FDA, EPA, FBI, etc) partners (LINK to Focus Area A, C, and G). 2. Evaluate exercise performance to identify strengths and weaknesses and implement a plan for improvement (LINK to Focus Areas A, C, and G).

Tasks: What key tasks will be conducted in carrying out each identified strategy?

1a Plan an exercise in coordination with all divisions of DOH as a whole and invite local an Federal partners, first responders, and laboratories to participate. 1b Set up and sponsor planning meetings. 1c Conduct the exercise and document performance. 2a Sponsor a follow-up meeting between representatives of all participants, analyze

performance, and solicit ideas for improvement.
2b With input from observers and co-participants, document exercise performance
2c Document areas for improvement and develop an implementation plan.
2d Implement improvement plan.

Timeline: What are the critical milestones and completion dates for each task?

1a Plan, 04/200
1b Meeting, Ongoing 2004
1c Exercise plan and schedule, 06/2004
2a Meeting agenda, 07/2004
2b Report, 07/2004
2c Report, 07/2004

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

1a-2b Division ERP
2c ELS Office Director

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

By participation in a simulation exercise, the WAPHL will be able to evaluate its capability for handling chemical terrorism agents as well as the state's overall preparedness for chemical terrorism response.

1. Use BSL-2 practices, as outlined in the CDC-NIH publication "Bio-safety in Microbiological and Biomedical Laboratories, 4th Edition" (BMBL), to process clinical specimens (e.g., blood and urine) -- see www.cdc.gov/od/ohs. CDC also recognizes the need that state laboratories have to safely handle unknown environmental samples. Laboratories are encouraged to participate with federal partners, the LRN, HAZMAT, first responders, and other state public health laboratories to develop and disseminate standardized methods, procedures, and protocols to safely triage, aliquot, transfer, ship, and store unknown clinical or environmental specimens potentially containing chemical, biological, radiological, or explosive agents. **(LINK WITH FOCUS AREA C)**

Strategies: What overarching approach(es) will be used to undertake this activity?

1. Consulting PHL Focus Area C group [redacted] internal [redacted] capacity for working with human specimens (Link to Activities of Enhanced Critical Capacity #7).
2. In cooperation with CDC, other federal partners (e.g., EPA, FDA, etc.), first responders, and WAPHL Microbiology and Radiation Laboratories, [redacted] protocols for receiving and handling unknown specimen/samples.
3. Incorporate guidelines and protocols into the Central Accessioning Plan at WAPHL.

Tasks: What key tasks will be conducted in carrying out each identified strategy?

1a As outlined in Activity 2, above, [redacted] equipment and supplies to [redacted] to receive and work with various unknown specimens.
1b [redacted] written procedures and protocols for internal processing of samples.
1c Train internal staff on use of equipment and safe practices in specimen handling (LINK to Focus Area G).
2a Consult with CDC, EPA FDA, FBI, industry associations, LRN, etc., on safe-handling practices with unknown specimens.
2b Meet with WAPHL Microbiology and Radiation laboratories to [redacted] a safe protocol for receiving unknown specimens/samples.
2c In collaboration with the WAPHL staff [redacted] a protocol for the receiving and handling of unknown specimens/samples.
2d Provide training to partner laboratories and first responders regarding the safe-handling protocols (LINK to Focus Area G).
3a As outlined in Activity 2, above, [redacted] equipment necessary to [redacted] receive and handle incoming samples from unknown sources.
3b Meet with architecture/engineering firms performing Central Accessioning design service to ensure equipment is incorporated into design.

Timeline: What are the critical milestones and completion dates for each task?

1a Purchase orders, 02/2004
1b Protocol, 03/2004
1c Training class, 03/2004
2a Information collected, 02/2004
2b Meetings agendas, notes, 02/2004
2c Protocol, 03/2004
2d Training class, 03/2004
3a Purchase orders, Ongoing
3b Meeting agendas, notes, Ongoing

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

1a-3a ELS Office Director
3b Facility Planner

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

By the end of 2003-04 grant period, the WAPHL will have a BSL-2 laboratory facility available for processing clinical specimens for chemical agents and will have a protocol for the handling of specimens/samples with unknown toxicity.

1. At a minimum, ensure that laboratory security is consistent with standards set forth in the Select Agent Rule or subsequent updates. Note that pursuant to 18 USC section 175b, as amended by section 817 of the USA PATRIOT Act of 2001, P.L. 107-56, aliens (other than aliens lawfully admitted to the United States for permanent residence) are prohibited from possessing select agents if they are nationals of countries about which the Secretary of State (pursuant to provisions of the Export Administration Act of 1979, the Foreign Assistance Act of 1981, or the Arms Export Control Act) has made an unrevoked determination that such countries have repeatedly provided support for acts of international terrorism.

Strategies: What overarching approach(es) will be used to undertake this activity?

1. Ensure that personnel hired to work on chemical terrorism grant projects have obtained security clearances necessary for compliance with Patriot Act of 2001.
2. As a part of the general WAPHL plan, ensure the upgrade of laboratory security to meet current CDC standards for possession, use and transfer of select agents (LINK TO Focus Area C).

Tasks: What key tasks will be conducted in carrying out each identified strategy?

1a	Following CDC requirements, ensure candidates being considered for chemical terrorism positions are eligible for a security clearance prior to receiving a job offer.
1b	Document security clearance.
2a	Identify CDC-recommended standards for laboratory security for select agents.
2b	Purchase equipment/supplies needed to meet CDC required/recommended standards.

Timeline: What are the critical milestones and completion dates for each task?

1a	Job qualifications, Ongoing
1b	Security clearance form, Ongoing
2a	Current CDC standards, 09/2003
2b	Purchase orders, 01/2004

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

1a	Division ERP
1b	Division ERP
2a	WAPHL Operation Manager
2b	WAPHL Operation Manager

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

By the end of the 2003-04 grant period, the laboratory will have policies and procedures on laboratory security, the personnel will be trained on select agent security, and laboratory security status will be evaluated annually.

2. Enhance and document Internet connectivity to enable rapid communication via the Internet for information and data transfer with chemical laboratories in the LRN. **(LINK WITH FOCUS AREA C & E)**

Strategies: What overarching approach(es) will be used to undertake this activity?

1. Plan for PHL Laboratory Information Management System (LIMS) conformity with APHL requirements document.
2. Participate in development of the WAPHL LIMS to ensure that the needs of the Environmental Laboratory are met (LINK WITH FOCUS AREA C and E).
3. Provide "need to know" accessibility within the LRN system for access to current protocols, equipment, supplies, etc.

Tasks: What key tasks will be conducted in carrying out each identified strategy?

1a Review APHL LIMS requirements
2a Work with WAPHL LIMS coordinator on components related to the Chemistry Laboratory needs
3a Establish "need to know" accessibility requirements in collaboration with CDC.

Timeline: What are the critical milestones and completion dates for each task?

1a Requirements document, 09/2003
2a Meetings, notes, requirements, document, Ongoing
3a Requirements, document, 10/2003

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

1a PHL LIMS Coordinator
2a PHL LIMS Coordinator
3a PHL LIMS Coordinator

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

By the end of the 2003-04 grant period, the LIMS needs for the WAPHL Environmental Sciences Laboratory (ESL) will be well defined and included in the LIMS development process.

ENHANCED CAPACITY #8 (Level-Three laboratories): In addition to maintaining Level-One and Level-Two capacity, Level-Three laboratories are to establish adequate and secure laboratory facilities, reagents, and equipment (e.g., tandem mass spectrometer) to rapidly detect and measure in clinical specimens Level-Three chemical agents (such as nerve agents, mustards, mycotoxins, and selected toxic industrial chemicals). Level-Three laboratories will also provide surge capacity to CDC and serve as referral laboratories for Level-One and Level-Two laboratories. The five laboratories currently funded under Focus Area D (California, Michigan, New Mexico, New York and Virginia) are considered Level-Three laboratories. It is CDC's

intent in the future to add up to five additional laboratories at Level-Three. *Prerequisite: To be considered for acceptance into Level-Three, a laboratory must demonstrate analytical competency at Level-Two, including success in an accepted proficiency testing program for all Level-Two chemical agents (e.g., heavy metals, lewisites, cyanide).*

RECIPIENT ACTIVITIES:

1. Level-Three laboratories must, in collaboration with CDC, purchase equipment, hire and train staff, implement analytical methods, participate in proficiency testing programs, and demonstrate competency in the analysis of Level-Three chemical agents or their metabolites in blood and urine.

Strategies: What overarching approach(es) will be used to undertake this activity?

Does Not Apply

Tasks: What key tasks will be conducted in carrying out each identified strategy?

Timeline: What are the critical milestones and completion dates for each task?

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

2. **CRITICAL BENCHMARK #17 – APPLICABLE TO LEVEL-THREE LABORATORIES ONLY:** Participate in at least one exercise per year that specifically tests chemical terrorism laboratory readiness and capability to detect and identify at least two chemical-threat agents.

Strategies: What overarching approach(es) will be used to undertake this activity?

Does Not Apply

Tasks: What key tasks will be conducted in carrying out each identified strategy?

Timeline: What are the critical milestones and completion dates for each task?

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

3. In collaboration with CDC and other Level-Three laboratories, participate in method development and validation studies.

Strategies: What overarching approach(es) will be used to undertake this activity?

Does Not Apply

Tasks: What key tasks will be conducted in carrying out each identified strategy?

Timeline: What are the critical milestones and completion dates for each task?

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

4. Provide surge capacity to CDC and serve as a referral laboratory for Level-One and Level-Two laboratories.

Strategies: What overarching approach(es) will be used to undertake this activity?

Does Not Apply

Tasks: What key tasks will be conducted in carrying out each identified strategy?

Timeline: What are the critical milestones and completion dates for each task?

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

5. Develop and implement a plan for 24/7 staff coverage in the event of a chemical terrorism emergency. Documentation of this plan should be provided to CDC to coordinate efforts.

Strategies: What overarching approach(es) will be used to undertake this activity?

Does Not Apply

Tasks: What key tasks will be conducted in carrying out each identified strategy?

Timeline: What are the critical milestones and completion dates for each task?

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?
